

C L A I M S

What is claimed is:

fig. 1 1. A connector for joining a hollow anatomical structure to another hollow anatomical structure, said connector comprising:

a first annular rigid body with an inner surface conformed reciprocally to an outer surface around a wall-opening of a first hollow anatomical structure and first holding means capable of keeping said first anatomical structure adjoined to said inner surface of said first annular body, wherein a union of said first annular body with a second annular rigid body of a second connector attached to a second hollow structure forms a fluidproof inner surface that surrounds abutted cut-edges of wall-openings of approximated first and second hollow structures.

2. The connector in Claim 1, wherein said connector further comprising coupling means for joining in a fluidproof union said first annular body with said second annular body.

3. The connector in Claim 2, wherein said connector further comprising means for preventing axial displacement of first anatomical structure adjoined to said first annular body.

4. The connector in Claim 2, wherein said inner surface of said first annular rigid body further comprising an inner microporous surface allowing ingrowth of connective tissues.

5. A union connector for joining a hollow anatomical structure to another hollow structure, said connector comprising:

(a) an inner fluidproof surface that surrounds abutted cut-edges of wall-openings of approximated first hollow anatomical structure and second hollow structure, said fluidproof surface formed by a union of a first annular rigid body with a second annular

rigid body, said first annular body with an inner surface conformed to an outer surface around a wall-opening of said first hollow structure, and said second annular body with an inner surface conformed to an outer surface around a wall-opening of said second hollow structure;

(b) first holding means capable of keeping said first hollow structure adjoined to said fluidproof surface of said union connector; and

(c) second holding means capable of keeping said second hollow structure adjoined to said inner fluidproof surface of said union connector.

6. The union connector in Claim 5, wherein said first annular body and said second annular body are consolidated in a seamless union.

7. The union connector in Claim 6, wherein said connector further comprising means for preventing axial displacement of at least one of the adjoined hollow structures.

8. The union connector in Claim 6, wherein said connector further comprising an inner microporous surface that allows ingrowth of connective tissues.

9. The union connector in Claim 5, wherein said connector further comprising coupling means for joining said first annular body with said second annular body in a fluidproof union.

10. The union connector in Claim 9, wherein said connector further comprising means for preventing axial displacement of at least one of the adjoined hollow structures.

11. The union connector in Claim 9, wherein said connector further comprising an inner microporous surface that allows ingrowth of connective tissues.

12. A union connector for joining a hollow anatomical structure to another hollow structure, said connector comprising:

(a) an annular rigid body with an inner fluidproof surface conformed reciprocally to outer surfaces of approximated first hollow anatomical structure and second hollow

structure, said fluidproof surface surrounding abutted cut-edges of wall-openings of said approximated first and second hollow structures;

(b) first holding means capable of keeping said first hollow structure adjoined to said fluidproof surface of said union connector; and

(c) second holding means capable of keeping said second hollow structure adjoined to said inner fluidproof surface of said union connector.

13. The union connector in Claim 12, wherein said fluidproof surface is formed by a union of a first annular rigid body with a second annular rigid body, said first annular body with an inner surface conformed to an outer surface around a wall-opening of said first hollow structure, and said second annular body with an inner surface conformed to an outer surface around a wall-opening of said second hollow structure.

14. The union connector in Claim 13, wherein said first annular body and said second annular body are consolidated in a seamless union.

15. The union connector in Claim 14, wherein said connector further comprising means for preventing axial displacement of at least one of the adjoined hollow structures.

16. The union connector in Claim 14, wherein said connector further comprising an inner microporous surface that allows ingrowth of connective tissues.

17. The union connector in Claim 13, wherein said connector further comprising coupling means for joining said first annular body with said second annular body in a fluidproof union.

18. The union connector in Claim 17, wherein said connector further comprising means for preventing axial displacement of at least one of the adjoined hollow structures.

19. The union connector in Claim 17, wherein said connector further comprising an inner microporous surface that allows ingrowth of connective tissues.

20. A method for joining a hollow anatomical structure to another hollow structure, said method comprising the steps of:

- (a) providing a first connector with a first annular rigid body with an inner surface conformed reciprocally to an outer surface around a wall-opening of a first hollow anatomical structure;
- (b) attaching said first hollow structure to said first annular body by holding means that keep said first hollow structure adjoined to said inner surface of said first annular body; and
- (c) joining in a union said first annular body of said first connector with a second annular rigid body of a second connector attached to a second hollow structure and forming a fluidproof surface that surrounds abutted cut-edges of approximated first and second hollow structures.

21. The method for joining of Claim 20, wherein said step of attaching said first hollow structure to said first annular body further comprising the step of ingrowth of connective tissues from said first hollow structure into said first annular body.

22. A method for joining two hollow anatomical structures, said method comprising the steps of:

- (a) providing a union connector comprising an annular rigid body with an inner fluidproof surface conformed reciprocally to outer surfaces of a first hollow anatomical structure and a second hollow structure, said first and second hollow structures being approximated and abutted with cut-edges of their wall-openings;
- (b) adjoining said first hollow anatomical structure to said fluidproof surface by first holding means affixed to said annular rigid body; and

(c) adjoining second hollow anatomical structure to said fluidproof surface by second holding means affixed to said annular body in a manner that cut-edges of wall-opening of said first hollow structure abut with cut-edges of wall-opening of said second hollow structure.

23. The method for joining of Claim 22, wherein said steps of adjoining said first and second hollow structures to said fluidproof surface of said annular body further comprising the step of ingrowth of connective tissues from said first and second hollow structures into said annular body of said connector.